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REMARKS

Claims 31-38 and 40-45 are pending in this application, with claims 1-30 and 39 having previously been canceled without prejudice or disclaimer. Claim 38 has been withdrawn by the Patent Office from examination. By the present Amendment, claim 31 has been amended to conform the claim with the amendment previously discussed in the April 6, 2010 telephone interview. Claims 31-38 and 40-45 remain pending upon entry of this Amendment, with claim 31 being the sole pending claim in independent form.

Claims 31-37, 40-43 and 45 were rejected under 35 U.S.C. § 102(a) and § 102(b) as purportedly anticipated by Sugimura (JP 2003-53953). Claim 44 was rejected under 35 U.S.C. § 103(a) as purportedly unpatentable over Sugimura in view of Maki et al. (US 2002/0126193 A1).

Applicant respectfully submits that the present application is allowable over the cited art, for at least the reason that the cited art does not disclose or suggest the aspects of the present application that a state detector that detects presence of the recording medium along a moving line of the carriage is provided on an upstream side of the carriage in a feed direction of the recording medium, and the printing operation is started in a subsequent main-scanning after the recording medium is conveyed and the state detector *detects an edge of the recording medium while scanning the carriage in the main-scanning direction in a current main-scanning*, and a controller receives detection information from the state detector when the state detector detects the edge of the recording medium in the main-scanning direction for each main-scanning of the carriage, and the controller determines therefrom a position of the edge of the recording medium for the printing operation of a subsequent line.

Applicant maintains the rejection hinges on an erroneous interpretation of the translation of Sugimura, more specifically, paragraph [0067] of Sugimura.

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(1) Sugimura, [0067], proposes that "In the inkjet printer 10 of FIG. 8, when the recording paper P is conveyed and the recording paper P is detected by the sensor 20, the recording paper P is moved rearward once and is printed by the ink head 101 in consideration of a time lag due to the distance d2 between the center position of the sensor 20 and the end of the inkjet head 101."

(2) The Office Action indicates that according to a machine translation of Sugimura, paragraph [0067] of Sugimura states that "if the record paper P is conveyed and the record paper P is detected by the sensor 20, in consideration of the time lag by the distance d2 of the center position of the sensor 20, and the end of the ink head 101, the record paper P will once retreat and will be printed by the ink head 101."

(1) and (2) are essentially the same except that (2) is a somewhat awkward translation from the viewpoint of English grammar and normal English usage.

On the other hand, the terms "once retreat" in the machine translation of paragraph [0067] of Sugimura clearly corresponds to the more proper translation to "moved rearward once."

In absolutely NO event would "once retreat" in the machine translation of paragraph [0067] of Sugimura be properly construed to mean "feed the paper in the downstream/forward/feed direction" as is apparently the misunderstanding embodied in the Office Action.

Since Sugimura proposes that the recording paper is moved rearward once, the apparatus of Sugimura clearly proposes to print at the current line in one main scanning operation, when the end of the paper is detected.

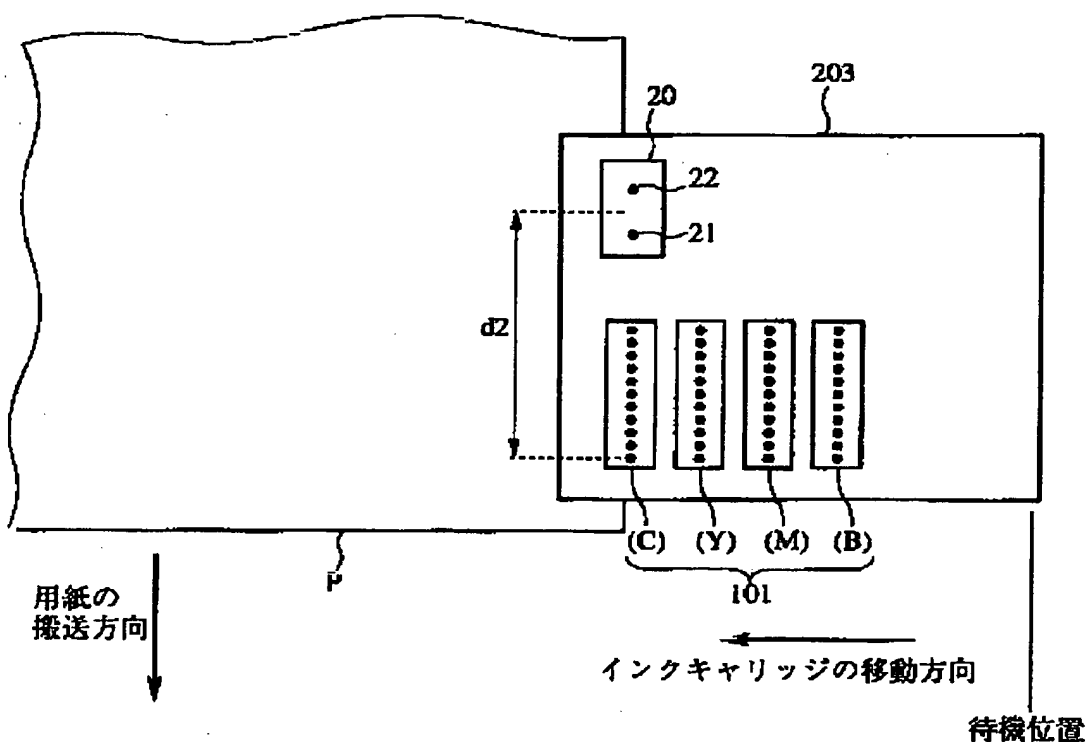
As illustrated in figure 8 (reproduced below, with annotation) of Sugimura, the sensor 20 is positioned on an upstream side of the ink head 101 in the paper conveying direction. When

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the recording paper P is conveyed from the upstream side to the downstream side, the sensor 20 detects the presence of the recording paper P. However, the recording paper P is moved rearward once after the recording paper P is detected, and then printing is performed by the ink head 101. Stated another way, Sugimura merely proposes that the printing operation is performed after the recording paper P is conveyed reversely from the downstream side to the upstream side.

【図8】



The control of the printing operation can be summarized as follows:

- (i) The recording paper P is conveyed from the upstream side to the downstream side

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(that is, in figure 8, from top to bottom).

- (ii) The sensor 20 detects presence of the recording paper P (while the recording paper P is continuously conveyed toward the downstream side).
- (iii) The conveyance of the recording paper P is stopped when the leading edge of the recording paper P is at a position on the downstream side of the ink head 101.
- (iv) The recording paper P is moved rearward (in figure 8, in direction from bottom toward the top), and the rearward conveyance is stopped when the leading edge of the recording paper P aligns with the ink head 101.
- (v) The ink head 101 is moved in the main scanning direction to detect an edge of the recording paper and to perform printing during the same main scanning operation (the ink head 101, which is at a different position from the sensor 20, performs printing using the result of edge detection performed at the position of the sensor 20).

Sugimura simply does NOT, as contended in the Office Action, propose that "after an end of recording paper P is detect by the sensor 20, the recording paper P is conveyed *forward* and, thereafter printing is performed (the sensor detects a paper width for the *next* scanning)." As already discussed above with reference to paragraph [0067] of Sugimura, Sugimura proposes moving recording paper P is moved rearward, when the recording paper P is detected.

It should be noted that figure 8 is merely a variation of the example of figures 3 and 4 of Sugimura, wherein print operation and detection of paper edge are performed during one main scanning operation (see paragraphs [0026], [0027] and [0050] of Sugimura). In each instance, Sugimura merely proposes printing at the position of the ink head 101, which is different from the position of the sensor 20, using the paper width information at the position of the sensor 20.

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Sugimura simply does NOT disclose or suggest detection of paper width for the NEXT main scanning.

Applicant submits that the cited art (including Maki, which has been amply discussed in the record), even when considered along with common sense and common knowledge to one skilled in the art, does **NOT** render unpatentable the aforementioned aspects of the present application.

Accordingly, applicant respectfully submits that independent claim 31 and the claims depending therefrom are allowable over the cited art.

In view of the remarks hereinabove, applicant submits that the application is now allowable, and earnestly solicits the allowance of the application.

However, if the Examiner can suggest a further amendment that would advance this application to condition for allowance, the Examiner is respectfully requested to call the undersigned attorney.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any required fees in connection with this amendment, and to credit any overpayment, to our Deposit Account No. 03-3125.

Respectfully submitted,



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